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AF) 1724

Response to Official Communication

Oct. 7, 2003

Reference: Application No. 09/973095 Applicant: Jerry Chi Wang Date of Communication: 7/30/2003
Title of Invention: Effluent Discharge System Facilitates Discharge of Sediments, and Powering of Underwater Machinery

This is in response to PTO 7/30/2003 notice on the official action on subject application. In compliance with the previous official action, this amendment is submitted to restate Claims 6 and 7 to overcome rejections under 35 U.S.C. 112.

Claims are amended as follow:

Claims 1 – 5 (canceled)

Claim 6 (currently amended) ~~A movable hydraulic powered dredging system, modified from a Claim 4 system with the addition of a hydraulic powered machine assembly and other modifications listed below, comprises~~ comprising:

- o a reservoir containing a body of water;
- o a hydraulic powered machine assembly at the conduit intake end incorporating a hydraulic drive unit attached with a dredge head and mounted in a housing, the inlet end of said housing is said system intake; and a dredge head attached to a common drive shaft;
- o a conduit means consisting of a flexible intake pipe section which runs between the dredge assembly housing outlet and a pipe fitting by the dam wall, a rigid pipe section passing through the dam wall, and a discharge pipe section extending from the dam wall on down stream side for transport the discharge water and the entrained sediments picked up from the reservoir to outside of the reservoir to the dam down stream side, said conduit means runs from the outlet of said hydraulic powered machine assembly housing through the wall of the reservoir, below the reservoir water level, to outside of the reservoir and the discharge end of said conduit means is disposed at an elevation sufficiently below the water level of the reservoir to maintain a flow of water through said conduit means; and
- o ~~a valve located at a convenient location in the conduit means for shut off or flow throttling;~~
- o a support and manipulating means such as that by suspending the dredge hydraulic powered machine assembly housing with cables from a mobile overhead crane or from a floating barge to support and move the hydraulic powered dredge machine assembly about the reservoir[;].

wherein the end of the discharge pipe section is disposed at an elevation height sufficiently below the reservoir water level to avail adequate hydrostatic head at the intake of the hydraulic drive unit to induce a strong discharge water flow to drive the dredge head and to entrain and carry the sediments through the conduit means to the dam down stream side;